

Treatment	Angioplasty			Clinical			Surgery			p
Period	pre	12m	24m	pre	12m	24m	pre	12m	24m	
Physical Functioning	59	72.8	72.44	50	66.2	62.50	47	73.5	73.69	0,002
Role Physical	34	52.6	51.13	23	39.8	38.49	21	48.2	50.19	0,018
General Health	65	63.8	66.09	63	60.8	62.40	63	64.4	68.19	0,018
Mental Health	66	74.6	42.59	63	70.4	42.47	64	74	41.14	NS
Vitality	64	72.2	46.13	56	61.6	41.94	56	73.8	45.27	0,02
Role Emotional	52	67.1	69.92	50	64.9	64.91	46	68.9	68.72	NS
Social Functioning	58	70	86.28	57	62.7	80.35	53	66.9	87.60	0,02
Bodily Pain	63	75.4	70.50	62	70.1	67.30	57	76.8	73.55	NS

1115-68

Predictors of Vascular Complications in Patients Undergoing Percutaneous Coronary Intervention and Treated With Vascular Closure Devices

Raj Goswami, John G. McGinnity, Arthur L. Riba, Cecelia K. Montoyo, Dean E. Smith, Julius Gardin, Michael J. O'Donnell, Anthony C. DeFranco, David Share, Mauro Moscucci, For The Blue Cross Blue Shield of Michigan Cardiovascular Consortium (BMC2), University of Michigan, Ann Arbor, MI

Objective. The objective of our study was to identify clinical predictors of vascular complications in patients undergoing contemporary percutaneous coronary interventions and treated with vascular closure devices, VCDs (Vasoseal, Angioseal, Perclose, or others).

Methods. Clinical, procedural and outcome data on 27,202 consecutive PCIs were prospectively collected between April 2001 and May 2003 in a consortium of 16 hospitals in Michigan. Independent predictors of vascular complications (VC) were identified using multivariate logistic regression analysis.

Results. 6270 patients received a vascular closure device. Vasoseal was used in 2.7%, Angioseal in 41.9%, Perclose in 54.7% and other devices in 0.7%. The overall vascular complication rate in this group was 3.3%. There was a non-significant trend toward an increased incidence of VC in patients treated with Vasoseal (4.38%) when compared with patients treated with Angioseal (2.98%) or Perclose (3.46%). Of 28 clinical and treatment variables including type of vascular closure device, multivariate analysis identified advanced age, female sex, acute myocardial infarction, cardiac arrest, cardiogenic shock and glycoprotein IIb/IIIa receptor blocker use as independent predictors of VC (all $p < 0.05$).

Conclusions. Baseline clinical characteristics identify patients at increased risk of vascular complications following use of VCD. The occurrence of vascular complications in these patients appears to be independent of the type of VCD.

1115-69

Lower Hematocrit Is Associated With Worse Health Status in Patients With Heart Failure

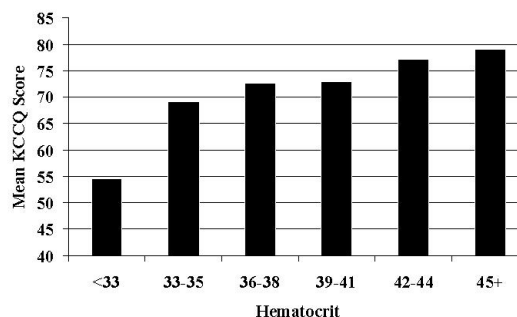
Avinash Khanna, Mikhail Kosoborod, Philip Jones, Harlan M. Krumholz, John A. Spertus, Mid America Heart Institute and University of Missouri at Kansas City, Kansas City, MO, Yale University, New Haven, CT

Background: Anemia is a potentially modifiable comorbid condition in patients with heart failure (HF). Its effect on health status has not been well defined. We tested the hypothesis that lower hematocrit levels in patients with post-Myocardial Infarction (MI) HF are associated with worse quality of life as measured by the Kansas City Cardiomyopathy Questionnaire (KCCQ).

Methods: The EPHEsus trial enrolled 6632 patients with post-MI HF, of which 1578 participated in the quality of life substudy. 3-month KCCQ scores were compared across the following ranges of hematocrit: <0.33, 0.33-0.35, 0.36-0.38, 0.39-0.41, 0.42-0.44 and ≥ 0.45 . This time was selected to reflect a chronic HF state following patients' MI.

Results: Compared with non-anemic patients, anemic patients (hematocrit <0.39) were more likely to be female (46% vs 20%, $p < 0.001$), older (68 ± 24 vs 62 ± 23 , $p < 0.0001$), diabetic (34% vs 23%, $p < 0.0001$) and to have a higher serum creatinine (1.3 ± 1.0 vs 1.1 ± 0.6 , $p < 0.001$). Lower hematocrits were associated with worse (lower) KCCQ scores. After adjusting for baseline demographic and clinical differences, a highly significant relationship between hematocrit and KCCQ summary scores was observed (Adjusted Means shown in Figure, $p < 0.0001$).

Conclusions: Lower hematocrits are associated with worse quality of life in HF patients, even after controlling for a range of potentially confounding factors. Further investigation of the health status benefits from correcting anemia in HF patients appears warranted.



1115-70

Effect of Obesity on Long-Term Survival Following Percutaneous Coronary Intervention

Kenneth C. Wen, Timothy A. Sanborn, Warren Sherman, **David L. Brown**, Beth Israel Medical Center, New York, NY

Background: Obesity is a powerful risk factor for the development of coronary artery disease. Paradoxically, recent studies have suggested that obesity actually protects against mortality following percutaneous coronary intervention (PCI). We sought to determine the impact of obesity on long-term survival following PCI using a contemporary database. **Methods:** The study population consisted of 4284 consecutive patients undergoing PCI from January 1, 1998 to October 1, 1999 at 3 hospitals in New York City. Patients were then divided into two groups, obese patients with body mass index (BMI) ≥ 30 ($n=1,410$) and non-obese patients with BMI < 30 ($n=2,874$). Primary endpoint was all-cause mortality following the index PCI. Mean follow-up was 3 years. **Results:** Obese patients were younger (60 vs. 65 years, $P < 0.001$) and more frequently female (36% vs. 29%, $P < 0.001$). Mean BMI was 34.7 in the obese patients and 25.6 in the non-obese patients ($P < 0.001$). Hypertension (74% vs. 68%, $P < 0.001$) and diabetes (33% vs. 24%, $P < 0.001$) were more common in obese patients while peripheral vascular disease (6.1% vs. 8.7%, $P < 0.001$) and prior bypass surgery (14% vs. 19%, $P < 0.001$) were less common. Presentation with myocardial infarction (9.4% vs. 11%, $P = NS$) and unstable angina (41% vs. 43%, $P = NS$) did not differ between obese and non-obese patients. Single-vessel coronary disease was more common in obese patients (53% vs. 46%, $P < 0.001$) and mean ejection fractions were slightly greater (51% vs. 50%, $P = 0.04$). Stent use did not differ between groups. Angiographic success was slightly reduced in obese patients (96% vs. 97%, $P = 0.06$). In-hospital major adverse cardiac events did not differ between obese and non-obese patients. Out-of-hospital death was 7.2% for obese patients and 10.3% in the non-obese ($P = 0.001$). After adjustment for differences in baseline characteristics, obesity was found not to be associated with an increased hazard of long-term mortality (Hazard Ratio, 0.992, 95% Confidence Interval, 0.784 – 1.254, $P = 0.945$). **Conclusion:** Obesity does not appear to protect patients from long-term mortality following PCI. However, neither does it increase the hazard of 3-year mortality after adjustment for other co-morbidities.

1115-71

Depression Is Strongly Associated With Worse Health Status in Patients With Myocardial Infarction Complicated by Heart Failure: Data From the EPHEsus Trial

John S. Rumsfeld, Mary A. Whooley, Philip Jones, Mark D. Sullivan, Pamela N. Peterson, William S. Weintraub, Bertram Pitt, John A. Spertus, Denver VA Medical Center, Denver, CO, University of Missouri-Kansas City, Kansas City, MO

Background: We evaluated the relationship between depression and health status in patients with acute MI complicated by heart failure.

Methods: Patients in the EPHEsus trial (NEJM, 2003) completed a Medical Outcomes Study-Depression (MOS-D) questionnaire at baseline and Kansas City Cardiomyopathy Questionnaire (KCCQ) at baseline, 1, 3, 6, and 12 months. The KCCQ measures heart-failure health status including symptoms, physical function, and quality of life. The KCCQ summary score has range 0-100; higher scores = better health status; 5 points = clinically important score difference. We used repeated measures and multivariable regression to evaluate the association between depressive symptoms (MOS-D score ≥ 0.06) and KCCQ summary scores.

Results: 93/423 patients (22%) had significant depressive symptoms. Depressed patients had markedly lower KCCQ scores during follow-up (Figure). After risk adjustment, depression remained significantly associated with worse baseline ($p < 0.001$) and 12-month ($p < 0.001$) KCCQ scores - on average, depressed patients had 8.8 point lower KCCQ scores at baseline and 13.4 point lower KCCQ scores at 12-months. Depressive symptoms were the strongest predictor of health status in the multivariable models.

Conclusion: In patients with AMI complicated by heart failure, depressive symptoms are